THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte STANLEY W. OLSON

Appeal No. 97-2481
Application No. 08/480,964[1]

HEARD: March 12, 1999

Before CALVERT, COHEN, and NASE, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 and 2, the only claims in the application.

[1] Application for patent filed June 7, 1995. According to appellant, this application is a continuation of Application No. 08/317,284, filed October 3, 1994, now U.S. Patent 5,489,220, issued February 6, 1996; which is a continuation of Application No. 08/053,486, filed April 28, 1993, now abandoned; which is a continuation of Application No. 07/968,694, filed October 30, 1992, now abandoned.

Claim 1 is representative of the subject matter on appeal, and reads:

> A filter connector arrangement
>
> comprising:
>
> a ferrite barrel having a bore therein, the bore having an axis therethrough, and
>
> an electrical connector disposed in said bore, said electrical connector having an axis therethrough and a substantially rectangular cross sectional configuration in a plane perpendicular to the axis of the connector;
>
> wherein the improvement comprises:
>
> the cross sectional configuration of the bore through the barrel in a plane perpendicular to the axis thereof is substantially rectangular and said bore accepts said electrical connector therein so as to provide improved mating alignment of said electrical connector with a mating structure within said bore and to provide a substantial increase in both differential and common mode inductances over a filter connector arrangement comprising said electrical connector and a ferrite barrel having a cylindrical bore for accepting said electrical connector.

The prior art applied in the final rejection is:

Reynolds	2,032,501	Mar. 3, 1936
Anderson	2,089,844	Aug. 10, 1937

The admitted prior art shown in Fig. 1 and described on page 1, line 15 to page 2, line 22 of the application (APA).

Claims 1 and 2 stand finally rejected on the following grounds:

(1) Unpatentable under 35 U.S.C. § 102(f), on the ground that the claimed subject matter was invented by Jerry E. Ponesmith;

(2) Unpatentable over APA in view of Reynolds and Anderson, under 35 U.S.C. § 103.

Rejection Under 37 CFR § 1.196(b)

Pursuant to 37 CFR § 1.196(b), claims 1 and 2 are rejected for failure to comply with the second paragraph of 35 U.S.C. § 112.

The test for compliance with § 112, second paragraph, is

> whether the claim language, when read by one of ordinary skill in the art in light of the specification, describes the subject matter with sufficient precision that the bounds of the claimed subject matter are distinct.

In re Merat, 519 F.2d 1390, 1396, 186 USPQ 471, 476 (CCPA 1975). See also In re Warmerdam, 33 F.3d 1354, 1361, 31 USPQ2d, 1754, 1759 (Fed. Cir. 1994). ("The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope").

In the present case, both claims recite "so as . . . to provide a substantial increase in both differential and common mode inductances" (emphasis added). The use of a term of degree, such as "substantial," in a claim does not render the claim

indefinite if the specification provides some standard for measuring that degree. Seattle Box Co., Inc. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 573-74 (Fed. Cir. 1984). Here, however, we do not find any such standard in appellant's specification. The only disclosure in the specification concerning an increase in inductance is found on page 6, line 23, to page 7, line 7, wherein it is stated that simulations of the magnetic performance of a filter connector using a ferrite barrel having a cylindrical bore and using a ferrite barrel having a rectangular bore indicated that the inductance of the latter was approximately five times that of the former. However, it is not apparent whether or not this disclosure constitutes a standard for measuring the recited "substantial increase," i.e., whether the expression "a substantial increase" in the claims should be interpreted as "an approximately five-fold increase," or, if not, how great an increase must be before it constitutes a "substantial increase." In view of the lack of a clear standard, we do not consider that one of ordinary skill could reasonably determine the scope of claims 1 and 2.

The Examiner's Rejections

Before considering the rejections under §§ 102(f) and 103 individually, we note that a rejection over prior art of claims

which are indefinite normally should not be considered. In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). Nevertheless, in the interest of avoiding piecemeal appellate review, we have considered the examiner's rejections on the merits, assuming that the claims would be unpatentable over prior art which corresponds to that disclosed in appellant's Fig 2. Note, however, the rejection under § 112, first paragraph, infra.

Rejection (1): 35 U.S.C. 102(f)

This rejection is based on declarations by Mr. Ponesmith and by Stanley Wayne Olson (the appellant). A declaration by each declarant was filed in parent application 07/968,694 on April 28, 1993, and an additional declaration by each was filed in parent application 08/053,486 on June 6, 1994.[2] It appears to be the examiner's position that a rejection under § 102(f)is proper because the declarations show that Mr. Ponesmith conceived the invention on October 16, 1990, prior to conception by Mr. Olson.

We will not sustain this rejection. As held in OddzOn Products Inc. v. Just Toys Inc., 122 F.3d 1396, 1401, 43 USPQ2d 1641, 1644 (Fed. Cir. 1997):

> Section 102(f) provides that a person shall be entitled to a patent unless "he did

[2] Copies of these four declarations were filed in the present application on September 11, 1995.

> not himself invent the subject matter sought to be patented." This is a derivation provision, which provides that one may not obtain a patent on that which is obtained from someone else whose possession of the subject matter is inherently "prior." It does not pertain only to public knowledge, but also applies to private communications between the inventor and another which may never become public.

Thus, since § 102(f) is "a derivation provision," a rejection thereunder cannot be based solely on the fact that the claimed subject matter was conceived by another prior to conception by the applicant, but rather, there must also be evidence that the applicant obtained the subject matter from that other person, i.e., that the prior conception was communicated to the applicant prior to the applicant's own alleged date of conception. In other words, for a § 102(f) rejection it must be shown that the applicant "acquired knowledge of the claimed invention from another, or at least so much of the claimed invention as would have made it obvious to one of ordinary skill in the art." New England Braiding Co. Inc. v. A.W. Chesterton Co., 970 F.2d 878, 883, 23 USPQ2d 1622, 1626 (Fed. Cir. 1992).

We will assume in this case that Mr. Ponesmith conceived the claimed subject matter, as shown in Exhibit A, prior to appellant. The record does not show, however, that Mr. Ponesmith's conception was communicated to appellant or that appellant otherwise acquired knowledge of it, prior to the filing of appellant's original (great-grandfather) application 07/968,694 on October 30, 1992. The only evidence in the record is to the contrary, namely, appellant states in paragraph 6 of his second declaration that "Prior to February, 1993, I had no knowledge of Exhibit A attached hereto or of the device shown in

Exhibit A," and describes in paragraph 7 how he conceived the subject matter of claim 1 during a meeting in March, 1992.[3] In the absence of any evidence in the record showing that appellant acquired his knowledge of the invention from another, there is no basis for rejecting the claims under § 102(f).

Rejection (2): 35 U.S.C. § 103

The basis of this rejection is stated on pages 3 and 4 of the examiner's answer. The two secondary references, Reynolds and Anderson, appear to be cumulative, so we will confine our consideration to Anderson.

As the examiner notes, Anderson discloses an advantage to using a non-circular, e.g., rectangular, contact in a correspondingly-shaped bore in the insulator barrel in which the contact (male or female) is located, namely, to prevent rotation of the contact in the bore, and "thus prevent[ing] liability of faults occurring, due to loosening of the connection between the contact members and the wires soldered to them" (page 2, col. 1, lines 39 to 46). We consider that this disclosure would have suggested to one of ordinary skill in the art disposing the rectangular cross-section connectors C of the APA in similarly-shaped bores in order to achieve the advantage disclosed by

[3] Appellant's alleged conception is corroborated by Taj F. Hanna in paragraph 6 of a declaration filed in this application on November 29, 1995.

Anderson, and thus, that the claimed subject matter would have been prima facie obvious.[4]

Appellant argues that "Anderson merely suggests the notoriously well known concept of shaping corresponding male and female contact sockets so that they fit together but do not fit into adjacent sockets" (brief, page 12). This is somewhat inaccurate, as the portions of Anderson's male and female contacts which fit together are not of different shapes; note page 1, col. 2, lines 30 to 34. In the Anderson apparatus, it is only the parts of the contacts which are within the insulating barrels 22, 24 which are of non-circular shapes (see page 2, col. 1, lines 32 to 39). The alignment of Anderson's male and female contacts is by means of recess 18 and lip 20 (page 1, col. 2, lines 43 to 52).

Appellant also contends that Anderson is not concerned with improving a mating connection within the bore, improving electrical characteristics, or preventing contamination by overmolding material (brief, page 12). While this may be, it is settled that "[a]s long as some motivation or suggestion to combine the references is provided by the prior art taken as a

[4] As discussed previously, this determination is made in light of the fact that modification of the APA in view of Anderson would yield a structure corresponding to that disclosed in appellant's Fig. 2.

whole, the law does not require that the references be combined for the reasons contemplated by the inventor." In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992). See also In re Kemps, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996) ("the motivation in the prior art to combine the references does not have to be identical to that of the applicant to establish obviousness").

We now turn to the rebuttal evidence submitted by appellant to determine whether it is sufficient to overcome the prima facie case of obviousness. In re Beattie, 974 F.2d at 1311, 24 USPQ2d at 1042-43. This evidence consists of the declarations of Mr. Hanna (note 3, supra) and of Dr. Richard A. Elco, filed on June 7, 1995.

Mr. Hanna (named as a coinventor in parent application 08/317,284) states that he has been responsible for the connector program of Berg Electronics, Inc. (formerly DuPont Connector Systems)[5] from approximately 1989 to the present (the declaration was signed on November 22, 1995). In essence, Mr. Hanna declares that (1) the five-fold improvement in EMI shielding resulting from Mr. Olson's invention was unexpected, and (2) in his

[5] In the brief (page 1), appellant identifies the assignee as Berg Technology, Inc.

opinion, Reynolds and Anderson do not suggest improving the APA of Fig. 1 by forming rectangular bores in the ferrite filter.

With regard to (1), a prima facie case of obviousness may be rebutted by a showing of unexpected results, but in order to do so, "objective evidence of non-obviousness must be commensurate in scope with the claims which the evidence is offered to support." In re Clemens, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980). See also In re Kulling, 897 F.2d 1147, 1149, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990). Mr. Hanna and Dr. Elco both state in their declarations that Dr. Elco mathematically modeled or simulated the circular bore and rectangular bore configurations, and found that the inductance or EMI shielding of the latter was approximately five times that of the former. According to Mr. Hanna (declaration paragraphs 9 to 13), a person of apparently at least ordinary skill in this art, the magnitude of this improvement was "quite unexpected" to himself and others, and in his opinion "it would not have been obvious to one skilled in the art that changing a cylindrical bore to a rectangular bore in a device of the type claimed would result in such a significant improvement in EMI shielding performance" (paragraph 13).

The problem with this evidence, however, is that Mr. Hanna also states in his declaration that "EMI shielding would not

necessarily be enhanced by simply filling the area of bores B_1 and B_2 formerly filled by air with ferrite material" (paragraph 11), and "it is not necessarily true that providing more ferrite material closer to the connector would necessarily result in better EMI shielding characteristics" (paragraph 12). Assuming these statements to be correct, it appears that achieving the claimed "substantial increase" in inductance must involve more than merely placing a rectangular cross-section connector in a rectangular cross-section bore in the ferrite barrel, but this is all that is required both by the claims and by appellant's disclosure. Since the claims do not include any restriction on the size of the connector relative to the size of the bore, and it appears from Mr. Hanna's statement that placing a rectangular cross-section connector in a rectangular cross-section bore would not necessarily result in increased inductance, the evidence of a five-fold increase in inductance is not commensurate with the scope of the claims, and therefore does not rebut the prima facie case of obviousness.

Mr. Hanna's opinions to the effect that the claimed subject matter is not suggested by Anderson is entitled to some weight. In re Lindell, 385 F.2d 453, 456, 155 USPQ 521, 524 (CCPA 1967). Nevertheless, while he recognizes that Anderson discloses that the corresponding shapes of the holes and contact members prevent

rotation (paragraph 20), Mr. Hanna does not address why this would not have made it obvious to modify the APA, but rather states that Anderson does not suggest using a rectangular bore in a ferrite barrel to improve a mating connection within the bore, etc. (paragraph 21). These statements are essentially arguments, and are not persuasive because one cannot show nonobviouness by attacking references individually. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 882 (CCPA 1981).

Rejection (2) will accordingly be sustained.

Rejections Under 37 CFR § 1.196(b)

The following rejections are additionally entered pursuant to 37 CFR § 1.196(b):

35 U.S.C. § 112, First Paragraph

Claims 1 and 2 are rejected under 35 U.S.C. § 112, first paragraph, as being based on a non-enabling disclosure.

In order to meet the enablement requirement of § 112, first paragraph, "the specification must enable one of ordinary skill in the art to practice the claimed invention without undue experimentation." National Recovery Technologies Inc. v. Magnetic Separation Systems Inc., 166 F.3d 1190, 1196, 49 USPQ2d 1671, 1676 (Fed. Cir. 1999) (original emphasis). As discussed above, the claims in the present case require that the connector provide a "substantial increase" in inductances over a filter

connector comprising a rectangular cross-section connector and a ferrite barrel with a cylindrical bore. The specification discloses no relative dimensions or other parameters for the connector and the bore, but in paragraphs 11 and 12 of his declaration (quoted supra) Mr. Hanna indicates that putting a rectangular cross-section connector in a bore of the same shape does not necessarily result in increased inductance (EMI shielding). It therefore appears that something more is required for a "substantial increase in inductance" than simply putting a rectangular cross-section connector in a rectangular cross-section bore, which is not disclosed as being of any particular size. Since the specification does not disclose what that "something more" is, it does not appear that one of ordinary skill in the art could construct a connector having the claimed "substantial increase" in inductances without undue experimentation, and the enablement requirement of § 112, first paragraph, is not satisfied.

Double Patenting

Claims 1 and 2 are rejected on the ground of obviousness-type double patenting over claim 3 of commonly-assigned parent Patent No. 5,489,220. In re Longi, 759 F.2d 887, 892, 225 USPQ 645, 648-49 (Fed. Cir. 1985). While the electrical connector recited in claim 3 of the patent is recited more narrowly than in

claim 1 and 2, the electrical connector of claims 1 and 2 reads on that recited in patent claim 3. Cf. In re Goodman, 11 F.3d 1046, 1052, 29 USPQ2d 2010, 2016 (Fed. Cir. 1993). As for the recitations of a "substantial increase" in inductances in claims 1 and 2, it is noted that the disclosure of the patent is the same as that of the present application, and therefore, insofar as can be determined, any properties of the filter connector recited in claims 1 and 2 must be inherent in the filter connector defined in the patent claim.

Conclusion

The examiner's decision to reject claims 1 and 2 under 35 U.S.C. § 102(f) is reversed, and under 35 U.S.C. § 103 is affirmed.

Claims 1 and 2 are rejected pursuant to 37 CFR § 1.196(b) on the bases of (a) 35 U.S.C. § 112, first paragraph (enablement), (b) 35 U.S.C. § 112, second paragraph, and (c) obviousness-type double patenting.

In addition to affirming the examiner's rejection of one or more claims, this decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)).

37 CFR § 1.196(b) provides that "a new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

> (b) Appellant may file a single request for rehearing within two months from the date of the original decision. . . .

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART; 37 CFR § 1.196(b)

IAN A. CALVERT Administrative Patent Judge	)
IRWIN CHARLES COHEN Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
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